DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-001604 Address: 333 Burma Road **Date Inspected:** 20-Feb-2008

City: Oakland, CA 94607

OSM Arrival Time: 800 **Project Name:** SAS Superstructure **OSM Departure Time:** 1730 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: Cui Yi Ru **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component:** OBG

Summary of Items Observed:

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Orthotropic Box Girders (OBG).

Bay 7 OBG:

The QA Inspector performed Magnetic Particle Testing (MT) on excavations in flange to Floor Beam Web Weld Joint (WJ) Numbers FB008-06-001 (1ea), FB008-03-009 (1ea), FB007-06-009 (1ea), FB007-06-009 (1ea), FB016-02-003 (3ea) and FB007-01-003 (1ea). The excavation of the welds was performed to remove transverse cracks observed during Magnetic Particle Testing performed by ZPMC QC Personnel. The QA Inspector observed 1 indication visually in WJ FB008-06-001 that had actually been partially obscured by the grinding. A transverse crack had been removed but there was a single porosity pore underneath with slag in the pore. ZPMC personnel removed the indication with a die grinder, and all excavations appeared to comply with contract requirements. The attached photographs provide additional detail.

The QA Inspector randomly observed ZPMC Welder Wang Linjiang ID Number 051356, utilizing the Flux Cored Arc Welding (FCAW) Process with ZPMC Weld Procedure Specification (WPS) WPS-B-T-2132-3 in the 2F (Horizontal Fillet) position, working on pick ups on Stiffener to Floor Beam Sub-Assembly on various Floor Beam Sub-Assemblies. The QA Inspector randomly observed ZPMC CWI Cui Yi Ru monitoring weld parameters.

The QA Inspector randomly observed ZPMC Welder Hong Shuili ID Number 044815, utilizing the FCAW Process with ZPMC WPS WPS-B-T-2132-3 in the 2F (Horizontal Fillet) position, to tack weld Stiffener X2S to

WELDING INSPECTION REPORT

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Floor Beam Sub-Assembly FB018-01 at WJ's FB018-01-106 and 107.





Summary of Conversations:

There were no relevant conversations.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Franco, Charlie	Quality Assurance Inspector
Reviewed By:	Cochran,Jim	QA Reviewer